

Claims:

1. An image compression system comprising:
 - a compression module that receives a first image in a sequence of images and compresses the image at least based on one or more parameters; and
 - a compression parameter module, the compression parameter module adapting the one or more parameters used on the first image for compression of a next image.
2. The system of claim 1, wherein the next image is compressed using the one or more adapted parameters.
3. The system of claim 1, wherein the compression parameter module adapts the one or more parameters based on a metric.
4. The system of claim 3, wherein the metric is at least based on one of image file size and image quality.
5. The system of claim 4, wherein the metric governing image quality is based on one or more of peak signal to noise ratio, mean squared error, human visual system models and operator inspection.
6. The system of claim 4, wherein the metric governing image file size is based on one or more of bitrate, compression ratio, and byte count.
7. The system of claim 3, wherein the metric is based on a difference between a target image file size and an achieved image file size.
8. The system of claim 3, wherein the metric is based on a difference between a target image quality and an achieved image quality.
9. The system of claim 1, wherein the one or more parameters are one or more of quantization parameters and truncation parameters.

10. The system of claim 9, wherein the quantization parameters are one or more of binwidths and quantization decisions.

11. The system of claim 9, wherein the truncation parameters are one or more of specific truncation points and truncation decisions.

12. The system of claim 1, wherein the image compression system is adapted to compress one or more of a sequence of images, time-series data, and 3-dimensional data sets.

13. The system of claim 1, wherein the compression parameter module iteratively controls the one or more parameters.

14. The system of claim 1, wherein the compression parameter module iteratively and dynamically controls the one or more parameters.

15. The system of claim 1, further comprising a binwidth selection module.

16. The system of claim 1, further comprising a truncation selection module.

17. The system of claim 1, further comprising a quantization selection module.

18. An image compression system comprising:

a compression module that receives n images and compresses the n images at least based on one or more parameters; and

a compression parameter module, the compression parameter module adapting the one or more parameters used on the n images, for use in compressing x images.

19. An image compression method comprising:

receiving a first image in a sequence of images and compressing the image at least based on one or more parameters; and

adapting the one or more parameters used on the first image for compression of a next image.

20. The method of claim 19, wherein the next image is compressed using the one or more adapted parameters.

21. The method of claim 19, wherein the compression parameter module adapts the one or more parameters based on a metric.

22. The method of claim 21, wherein the metric is at least based on one of image file size and image quality.

23. The method of claim 22, wherein the metric governing image quality is based on one or more of peak signal to noise ratio, mean squared error, human visual system models and operator inspection.

24. The method of claim 22, wherein the metric governing image file size is based on one or more of bitrate, compression ratio, and byte count.

25. The method of claim 21, wherein the metric is based on a difference between a target image file size and an achieved image file size.

26. The method of claim 21, wherein the metric is based on a difference between a target image quality and an achieved image quality.

27. The method of claim 19, wherein the one or more parameters are one or more of quantization parameters and truncation parameters.

28. The method of claim 27, wherein the quantization parameters are one or more of binwidths and quantization decisions.

29. The method of claim 27, wherein the truncation parameters are one or more of specific truncation points and truncation decisions.

30. The method of claim 19, wherein the first image and the next image are one or more of a sequence of images, time-series data, and 3-dimensional data sets.

31. The method of claim 19, further comprising iteratively controlling the one or more parameters.

32. The method of claim 19, further comprising iteratively and dynamically controlling the one or more parameters.

33. The method of claim 19, further comprising selecting a binwidth.

34. The method of claim 19, further comprising selecting a truncation.

35. The method of claim 19, further comprising selecting a quantization.

36. An image compression method comprising:

receiving n images and compressing the n images at least based on one or more parameters; and

adapting the one or more parameters used on the n images, for use in compressing x images.

37. An image compression system comprising:

means for receiving a first image in a sequence of images and compressing the image at least based on one or more parameters; and

means for adapting the one or more parameters used on the first image for compression of a next image.

38. The system of claim 37, wherein the next image is compressed using the one or more adapted parameters.

39. The system of claim 37, wherein the means for adapting adapts the one or more parameters based on a metric.

40. The system of claim 39, wherein the metric is at least based on one of image file size and image quality.

41. The system of claim 40, wherein the metric governing image quality is based on one or more of peak signal to noise ratio, mean squared error, human visual system models and operator inspection.

42. The system of claim 40, wherein the metric governing image file size is based on one or more of bitrate, compression ratio, and byte count.

43. The system of claim 39, wherein the metric is based on a difference between a target image file size and an achieved image file size.

44. The system of claim 39, wherein the metric is based on a difference between a target image quality and an achieved image quality.

45. The system of claim 37, wherein the one or more parameters are one or more of quantization parameters and truncation parameters.

46. The system of claim 45, wherein the quantization parameters are one or more of binwidths and quantization decisions.

47. The system of claim 45, wherein the truncation parameters are one or more of specific truncation points and truncation decisions.

48. The system of claim 37, wherein the first image and the next image are one or more of a sequence of images, time-series data, and 3-dimensional data sets.

49. The system of claim 37, further comprising iteratively controlling the one or more parameters.

50. The system of claim 37, further comprising iteratively and dynamically controlling the one or more parameters.

51. The system of claim 37, further comprising means for selecting a binwidth.

52. The system of claim 37, further comprising means for selecting a truncation.
53. The system of claim 37, further comprising means for selecting a quantization.
54. An image compression system comprising:
 - means for receiving n images and compressing the n images at least based on one or more parameters; and
 - means for adapting the one or more parameters used on the n images, for use in compressing x images.
55. An image compression protocol comprising:
 - receiving a first image in a sequence of images and compressing the image at least based on one or more parameters; and
 - adapting the one or more parameters used on the first image for compression of a next image.
56. The protocol of claim 55, wherein the next image is compressed using the one or more adapted parameters.
57. The protocol of claim 55, wherein the compression parameter module adapts the one or more parameters based on a metric.
58. The protocol of claim 57, wherein the metric is at least based on one of image file size and image quality.
59. The protocol of claim 58, wherein the metric governing image quality is based on one or more of peak signal to noise ratio, mean squared error, human visual system models and operator inspection.
60. The protocol of claim 58, wherein the metric governing image file size

is based on one or more of bitrate, compression ratio, and byte count.

61. The protocol of claim 57, wherein the metric is based on a difference between a target image file size and an achieved image file size.

62. The protocol of claim 57, wherein the metric is based on a difference between a target image quality and an achieved image quality.

63. The protocol of claim 55, wherein the one or more parameters are one or more of quantization parameters and truncation parameters.

64. The protocol of claim 63, wherein the quantization parameters are one or more of binwidths and quantization decisions.

65. The protocol of claim 63, wherein the truncation parameters are one or more of specific truncation points and truncation decisions.

66. The protocol of claim 55, wherein the first image and the next image are one or more of a sequence of images, time-series data, and 3-dimensional data sets.

67. The protocol of claim 55, further comprising iteratively controlling the one or more parameters.

68. The protocol of claim 55, further comprising iteratively and dynamically controlling the one or more parameters.

69. The protocol of claim 55, further comprising selecting a binwidth.

70. The protocol of claim 55, further comprising selecting a truncation.

71. The protocol of claim 55, further comprising selecting a quantization.

72. An image compression protocol comprising:

receiving n images and compressing the n images at least based on one or more parameters; and

adapting the one or more parameters used on the n images, for use in compressing x images.

73. An information storage media comprising information that compresses images comprising:

information that receives a first image in a sequence of images and compresses the image at least based on one or more parameters; and

information that adapts the one or more parameters used on the first image for compression of a next image.

74. The media of claim 73, wherein the next image is compressed using the one or more adapted parameters.

75. The media of claim 73, wherein the information that compresses adapts the one or more parameters based on a metric.

76. The media of claim 75, wherein the metric is at least based on one of image file size and image quality.

77. The media of claim 76, wherein the metric governing image quality is based on one or more of peak signal to noise ratio, mean squared error, human visual system models and operator inspection.

78. The media of claim 76, wherein the metric governing image file size is based on one or more of bitrate, compression ratio, and byte count.

79. The media of claim 75, wherein the metric is based on a difference between a target image file size and an achieved image file size.

80. The media of claim 75, wherein the metric is based on a difference between a target image quality and an achieved image quality.

81. The media of claim 73, wherein the one or more parameters are one or more of quantization parameters and truncation parameters.

82. The media of claim 81, wherein the quantization parameters are one or more of binwidths and quantization decisions.

83. The media of claim 81, wherein the truncation parameters are one or more of specific truncation points and truncation decisions.

84. The media of claim 73, wherein the first image and the next image are one or more of a sequence of images, time-series data, and 3-dimensional data sets.

85. The media of claim 73, further comprising information that iteratively controls the one or more parameters.

86. The media of claim 73, further comprising information that iteratively and dynamically controls the one or more parameters.

87. The media of claim 73, further comprising information that selects a binwidth.

88. The media of claim 73, further comprising information that selects a truncation..

89. The media of claim 73, further comprising information that selects a quantization.

90. An information storage media comprising information that compresses images comprising:

information that receives n images and compresses the n images at least based on one or more parameters; and

information that adapts the one or more parameters used on the n images, for use in compressing x images.

91. A storage media comprising information that has been compressed in accordance with a process comprising:

receiving n images and compressing the n images at least based on one or more parameters; and

adapting the one or more parameters used on the n images, for use in compressing x images.